

ABSTRACT OF THE DISCLOSURE.

Bright and dark field imaging operations in an optical inspection system occur along substantially the same optical path using the same light source by 5 producing either a circular or an annular laser beam. Multiple beam splitting is achieved through the use of a diffractive optical element having uniform diffraction efficiency. A confocal arrangement for bright field and dark field imaging can be applied with multiple beam 10 scanning for suppressing the signal from under-layers. A scan direction not perpendicular to the direction of movement of a target provides for improved die-to-die comparisons.